

Notice of Allowability

Application No.

10/050,134

Examiner

Dah-Wei D. Yuan

Applicant(s)

ASANO ET AL.

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/29/04.
2. ☒ The allowed claim(s) is/are 5,8,9 and 12.
3. ☒ The drawings filed on 18 January 2005 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

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**POLYMER ELECTROLYTE MEMBRANE, METHOD FOR PRODUCING SAME, AND
MEMBRANE ELECTRODE ASSEMBLY AND POLYMER ELECTROLYTE
FUEL CELL COMPRISING SAME**

Examiner: Yuan

S.N. 10/050,134

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February 15, 2005

Detailed Action

1. The Applicant's amendment filed on December 29, 2004 was received. Claims 1-4 were cancelled. Claims 5,8,9 were amended.
2. The text of those sections of Title 35, U.S.C. code not included in this action can be found in the prior Office Action issued on September 29, 2004.

Examiner's Amendment

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
4. This application is in condition for allowance except for the presence of claims 13-40 non-elected without traverse. Accordingly, claims 13-40 have been cancelled.

Claim Rejections

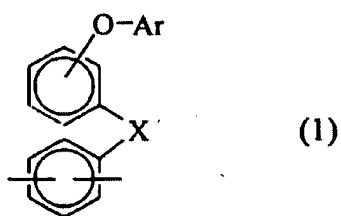
5. The claim rejections under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nolte et al. on claims 1,5,9 are withdrawn because the

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independent claim 1 has been canceled and independent claims 5,9, have been amended. The claim rejections under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Helmer-Metzmann et al. as evidenced by Nolte et al. on claims 1,5,9 are withdrawn because the independent claim 1 has been canceled and independent claims 5,9, have been amended.

Reasons for Allowance

6. Claims 5,8,9,12 are allowed. The invention of independent claims 5,8,9,12 recites a polymer electrolyte membrane obtained by subjecting an ion-conducting, aromatic polymer membrane to a hot-water treatment, wherein said ion-conducting, aromatic polymer membrane is a sulfonated polyarylene membrane, and wherein the sulfonated polyarylene is a sulfonated arylene copolymer obtained by introducing a sulfonic group into a side chain of a copolymer comprising 30-95 mol % of a first aromatic monomer unit represented by a chemical formula (1)



and 70-5 mol% of a second aromatic monomer unit represented by the chemical formula (2).



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The closest prior arts of record, Helmer-Metzmann et al. and Nolte et al., do not disclose or suggest the polymer comprising 30-95 mol% of a first aromatic monomer unit represented by the formula (1) and 70-5 mol% of a second aromatic monomer unit represented by the chemical formula (2) as stated in the claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dah-Wei D. Yuan whose telephone number is (571) 272-1295. The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dah-Wei D. Yuan
February 15, 2005

